

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,841		10/16/2003	Robert W. Lamberton	I69.12-0613	8492
164	7590	09/29/2006		EXAMINER .	
		E, P.A.	BERNATZ	BERNATZ, KEVIN M	
THE KINN 312 SOUTI		NGE BUILDING STREET		ART UNIT	PAPER NUMBER
		N 55415-1002		1773	
			DATE MAILED: 09/29/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Supplementa/	10/686,841	LAMBERTON ET AL.	
Notice of Allowability	Examiner	Art Unit	·
	Kevin M. Bernatz	1773	
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	IS (OR REMAINS) CLOSED in 35) or other appropriate common RIGHTS. This application is so	n this application. If not included unication will be mailed in due course	. THIS e initiative
1. This communication is responsive to <u>amendment filed 5</u> ,	<u>/1/06</u> .		
2. The allowed claim(s) is/are 1 and 3-23.			
 3. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the: 1. Certified copies of the priority documents had 2. Certified copies of the priority documents had 3. Copies of the certified copies of the priority of International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	ave been received. ave been received in Application documents have been received. E" of this communication to file NMENT of this application. Demitted. Note the attached EXA pives reason(s) why the oath of the nust be submitted. Berson's Patent Drawing Reviewer's Amendment / Comment of the the header according to 37 CF posit of BIOLOGICAL MATION.	In No If in this national stage application from this national stage application from the requirement of the complying with the requirement of the complying with the requirement of the complying with the requirement of the complete complying with the requirement of the complete com	ents . E OF
Attachment(s)	·		
Notice of References Cited (PTO-892) Notice of Profitnerson's Patent Proving Review (PTO 948)		formal Patent Application (PTO-152)	
2. Notice of Draftperson's Patent Drawing Review (PTO-948	Paper No./	ummary (PTO-413), Mail Date	
 Information Disclosure Statements (PTO-1449 or PTO/SE Paper No./Mail Date 	3/08), 7. ☒ Examiner's	Amendment/Comment	
 Examiner's Comment Regarding Requirement for Deposi of Biological Material 	t 8. ⊠ Examiner's	Statement of Reasons for Allowance	
· g	9. 🗌 Other	_	

Application/Control Number: 10/686,841 Page 2

Art Unit: 1773

Examiner's Comments

1. The following Supplemental Notice of Allowance is to correct the inadvertent omission of claims 20 – 23 from the prior Notice of Allowance.

Reasons for Allowance

2. The present claims are deemed allowable over the references of record since the references of record fail to disclose or render obvious a magnetic element comprising a nanophase magnetic material meeting applicants' claimed structural and property limitations.

While the prior art of record disclose the general concept of high saturation moment materials comprising nanoclusters, the prior art of record fail teach or render obvious a magnetic material incorporating nanoclusters of a first magnetic material comprising *both* approximately 200 to 800 atoms per nanoclusters and nanoclusters sizes of about 1 nm to about 5 nm, wherein the nanoclusters are surrounded by a second magnetic material. The Examiner notes that there is sufficient evidence of record that a range in atoms of 200 to 800 atoms per nanoclusters would not inherently possess a size of about 1 nm to about 5 nm given that the overall size is determined by the atom types and packing density (i.e. different elemental compositions and different crystal structures will result in different overall nanoclusters sizes for identical atom amounts).

Application/Control Number: 10/686,841

Art Unit: 1773

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Bernatz whose telephone number is (571) 272-1505. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMB September 18, 2006 Kevin M. Bernatz, PhD Primary Examiner

Page 3